

Date: Sun, 7 Mar 93 19:42:38 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #287  
To: Info-Hams

Info-Hams Digest                      Sun, 7 Mar 93                      Volume 93 : Issue 287

Today's Topics:

1 Watt = ? dBm ?  
30-m qrpdir  
Advice in converting 150-162MHz Motorola Micor to 2 Meter Band  
ANS Bulletin  
Club Liability Insurance (2 msgs)  
Grid Squares  
HTX-202 MODS ??????  
Internet/News access in Dallas area  
Looking for JVFX-5.0 Users  
Periphex SUCKS! (3 msgs)  
QSL HELP PLEASE  
RACES Bulletin #264  
Rubber radios? (was Re: Periphex Doesn't Suck)  
V26AS address

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Sun, 7 Mar 1993 19:31:28 GMT  
From: swrinde!cs.utexas.edu!wupost!darwin.sura.net!haven.umd.edu!news.umbc.edu!  
gmuvax2!emeinfel@network.UCSD.EDU  
Subject: 1 Watt = ? dBm ?  
To: info-hams@ucsd.edu

arm@helix.nih.gov (Andrew Mitz) wrote:  
>dBm is often used for a measure of RF output power of low power  
>devices. What is the conversion of dBm to watts?

>

$\text{dBm} = 10 * \text{Log}(\text{base10}) [P2 / .001]$

If P2 = 1 watt then that is 30 dBm

73, Jim

-----

Date: 7 Mar 93 13:07:33 CST

From: usc!howland.reston.ans.net!zaphod.mps.ohio-state.edu!menudo.uh.edu!

ccsvax.sfasu.edu!f\_speerjr@network.UCSD.EDU

Subject: 30-m qrpdir

To: info-hams@ucsd.edu

In article <1993Mar4.092716.3290@ccsvax.sfasu.edu>, f\_speerjr@ccsvax.sfasu.edu writes:

> Thanks to all who responded to my request for information about 30 meter qrp  
> gear. I finally wound up getting the MFJ rig, so for interested readers here's  
> a brief review.

>

> The receiver is a single stage superhet with the IF at 6 mhz and 700 hz crystal  
> filter. A 4-pole 700 hz audio filter is optional. Analog tuning is slow,  
> smooth, and near enough linear. RIT is provided.

>

> This is a wonderful receiver. Great dynamic range, wonderful agc (though with  
> the audio filter it produces a click with the onset of very strong signal),  
> excellent intermod characteristics, plenty selective, stable as a rock, and  
> very good noise figure.

>

> Transmitter seems fine. It's getting good reports, producing an honest 4 watts,  
> and operating with no problems. Optional built-in curtis keyer works well,  
> though it is all preset, with no adjustments except speed.

>

> And incidentally the MFJ paddle is also ok -- good as the Bencher, I guess, and  
> maybe a little cheaper.

>

> Thanks to all who offered advice.

>

> 73 and cheers!

> Jim, K5YUT

>

> James R. Speer

Phone: 409 568 1478

> Department of Psychology

Fax: 409 568 2190

> Stephen F. Austin State University

E-mail: F\_SPEERJR@ccsvax.sfasu.edu

> Nacogdoches TX 75962-3046

Ham Radio: K5YUT

>

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>

A further follow-up after more testing:

All the above is true, but when transmitting (not when receiving) the thing drifts consistently at the rate of about 200 hz per hour. MFJ's literature says it will drift if it is heated (e.g., operated in direct sunlight), but this drift occurs in a thermally-stable indoor environment.

Think I can live with it, but will consult with MFJ to see if there is a fix.

Cheers & 73!

Jim - K5YUT

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Date: Sun, 7 Mar 1993 17:31:17 GMT

From: sdd.hp.com!usc!wupost!eclnews!wucs1!jdw@network.UCSD.EDU

Subject: Advice in converting 150-162MHz Motorola Micor to 2 Meter Band

To: info-hams@ucsd.edu

I am looking for any info related to converting a Motorola Micor (Model Number T73RTN1190A) from the 150-160MHz range to the 2M band for Amateur use. I'm trying to convert it to be used as a repeater. This is the 110W model, and I plan on setting the power down to about 40W to protect the PA output and a respectable duty cycle etc...

I have the Motorola manual. I have already called Motorola about getting the right helical coils for the Preselector section... A reasonable \$35 for the set. The rest of the receiver is a few caps and resistors. I have the channel elements, and can get Xstals for about \$10 each... Xmit and Recv.

I am looking for any advice on the conversion process, e.g., is it worth the \$'s to buy the Harmonic and Bandpass filters for the PA section? The above runs about \$110.00 for both from Motorola. Has anyone converted one of these Micors without modifying the PA section? Any help and tips would be appreciated. See related post in rec.radio.swap

Thanks

\*\*\*\*\*

john d wilson N0TYZ/AA

Washington University in St. Louis

WUARC W0QEV

Internet: jdw@wucs1.wustl.edu

-----  
Date: 8 Mar 93 02:54:46 GMT

From: news-mail-gateway@ucsd.edu  
Subject: ANS Bulletin  
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-065.06  
PHASE 3D MEETING REPORT

HR AMSAT NEWS SERVICE BULLETIN 065.06 FROM AMSAT HQ  
SILVER SPRING, MD MARCH 6, 1993 BID:\$ANS-065.06  
TO ALL RADIO AMATEURS BT  
Phase 3D Design Meeting Held in Orlando

A meeting of some 20 people from the U.S. Canada, Germany and Japan; participating in the Phase 3D design program was held in Orlando, Florida February 25 through 28. This meeting represented an important milestone in the Phase 3D project. At it, the overall design of the satellite was agreed upon. It will be a hexagonal design 1120 mm ( 44 inches) on each side and 675 mm ( 26-1/2 inches high). The spacecraft's mass will be about 400 kg (880 lbs). Solar panels will cover two of the flat side surfaces and two more panels will unfold using a double hinge mechanism. The total span, with these panels deployed will be about 6450 mm (21 feet). Phase 3D will be carried by the Ariane 5 launcher inside a large cylinder and ejected from it.

A major decision reached involved relocating the high gain antennas. In previous designs, these antennas were on the side opposite the nozzle. While this provided more area for them, it also entailed a severe restriction on their height caused by potential mechanical interference with parts of the launching rocket. This height restriction dictated the use of low profile patch arrays for most bands.

By locating the antennas to the motor nozzle side of the spacecraft, they can project farther above the surface - making possible the use of more conventional antennas. For example, S and C bands are now expected to share a dish with a dual band feed. This can be contrasted with the very flat patch arrays which would be required in the original location, on the side opposite the nozzle. The 70 cm antenna will continue to use patches - in this case a six patch array, surrounding the motor nozzle. For 2 meters, three half wave dipoles will be used and 10 meters will employ whips to form a 2 element beam.

Estimated gains for the various bands are:

10 meters          4 dBi

2 meters	8.4 DBic
70 cm	13 dBic
1.2 Ghz	15.5 dBic
2.4 GHz	17 dBic
5.6 GHz	19 dBic
10 GHz	20 dBic

The design architecture for the computers which will control the satellite and handle data, along with the local area network (LAN), which will connect them with the various on-board systems; was presented in some detail by Peter Gulzow DB20S. The LAN will employ two busses, one at about 100 to 200 kilobits per second while the other will run at about 1 megabit per second. The high speed LAN will handle the data, and the other will take care of control functions.

The concept of using GPS, in addition to optical sensors, for attitude determination, as proposed by Tom Clark W3IWI, was also discussed and found to provide real benefits. Tom also offered a concept of providing a central oscillator to control all receivers and transmitters. This suggestion was accepted in principle, although it was emphasized that each receiver and transmitter should also provide its own frequency source. Tom also proposed that correction be applied to the output of the central oscillator to remove the effect of Doppler as the satellite traverses its orbit. He noted that, unless something is done, Doppler will be particularly troublesome at 10 GHz. W3IWI's concept also calls for the central oscillator to be referenced to GPS to provide very accurate frequency.

Miki Nakayama JR1SWB reported on the camera experiment, being provided by the JANSAT group. This seems well along, including the building of some prototype hardware. Two earth-looking cameras plus another, longer focal length unit, looking out into space are being proposed. It was noted that the camera looking into space may provide the opportunity for doing some interesting astronomy while the others should produce some worthwhile wide and narrow angle views of the earth. It was noted that, from the high elliptical orbit which Phase 3D will use, it should be possible to obtain pictures of the northern auroral oval.

The systems which seem the least well along are the RF units. Karl Meinzer DJ4ZC said that the 70 cm transmitter is expected to

be built in Germany, but no solid offers from potential builders of the 2 meter, 2.4 GHz and 5.6 GHz transmitters have yet materialized.

On the other hand, quite a bit of work has been accomplished on the antennas, although some of this will have to be redone with the move to the nozzle side of the spacecraft. But since more height is now available, the job should be much easier than before. Bob Stilwell along with several Johns Hopkins students, and Stan Wood WA4NFY are those principally working on the Phase 3D antennas.

Keith Baker KB1SF presented a proposal to provide a more formalized scheduling structure using a commercial software package. His offer was accepted with thanks. It was also decided to employ interface documentation much like that used on earlier Phase 3 satellites.

Upon completion of the meeting, Dick Jansson WD4FAB went to work to produce the many drawings which will be necessary before actual fabrication of the satellite's structure can begin.

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Date: 7 Mar 93 05:25:33 GMT  
From: decrcrl!news.crl.dec.com!dbased.nuo.dec.com!nnnpd.lkg.dec.com!  
sousa.tay.dec.com!bobseg.enet.dec.com!segrest@decwrl.dec.com  
Subject: Club Liability Insurance  
To: info-hams@ucsd.edu

Greetings,

The local club has been offered access to an excellent transmission site with the requirement that we show proof of at least one million dollars worth of liability insurance. I went to our fearless leader and he informed me that the club does not have any insurance. Wow!

Do most amateur radio clubs have insurance?

Is club liability insurance available and what does it cost?

Is this something the ARRL can help with?

--  
Bob Segrest  
segrest@bobseg.enet.dec.com  
-----

Date: 7 Mar 93 16:47:05 CST  
From: usc!zaphod.mps.ohio-state.edu!menudo.uh.edu!ccsvax.sfasu.edu!  
f\_speerjr@network.UCSD.EDU  
Subject: Club Liability Insurance  
To: info-hams@ucsd.edu

In article <2660@sousa.tay.dec.com>, segrest@bobseg.enet.dec.com writes:

>  
> Greetings,  
>  
> The local club has been offered access to an excellent transmission site with  
> the requirement that we show proof of at least one million dollars worth of  
> liability insurance. I went to our fearless leader and he informed me that  
> the club does not have any insurance. Wow!  
>  
> Do most amateur radio clubs have insurance?  
>  
> Is club liability insurance available and what does it cost?  
>  
> Is this something the ARRL can help with?  
>  
> --  
> Bob Segrest  
> segrest@bobseg.enet.dec.com

About 10 years ago the local club wanted to put a repeater on top of a water tower and the town made a similar demand. We got \$1m liability insurance from ARRL quite cheaply. I guess it's still available.

73, Jim, K5YUT

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James R. Speer	Phone: 409 568 1478
Department of Psychology	Fax: 409 568 2190
Stephen F. Austin State University	E-mail: F_SPEERJR@ccsvax.sfasu.edu
Nacogdoches TX 75962-3046	Ham Radio: K5YUT

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Date: 5 Mar 93 19:26:34 GMT  
From: pipex!sunic!psinntp!psinntp!gdstech!gdstech!bat@uunet.uu.net  
Subject: Grid Squares  
To: info-hams@ucsd.edu

There is a neat little program called GRID.COM for the PC that does a 2 way conversion. It's available from the ARRL BBS: 203-666-0578.

--

```
*-----*
*   Pat Masterson   D12-25   | KE2LJ@KC2FD           *
*   Grumman Data Systems | 516-346-6316.         *
*   Bethpage, NY 11746   | bat@gdstech.grumman.com    *
```

-----  
Date: Sun, 7 Mar 1993 23:17:29 GMT  
From: destroyer!cs.ubc.ca!utcsri!newsflash.concordia.ca!nsth.nh.ca!  
news.ucs.mun.ca!csd.unb.ca!unbham@uunet.uu.net  
Subject: HTX-202 MODS ??????  
To: info-hams@ucsd.edu

I know this question has been asked many times and will probably be repeated many times in the future. My friend has an HTX-202 Radio Shack HT and would like to know if there are any mods for this unit. If so, could you perhaps tell me what mods are available and/or how the procedure is done.

Thanks...

Don Trynor(VE1ARZ)  
UNBHAM@JUPITER.SUN.CSD.UNB.CA

-----  
Date: 7 Mar 93 09:42:46 -0700  
From: usc!sol.ctr.columbia.edu!destroyer!cs.ubc.ca!mala.bc.ca!  
wagner@network.UCSD.EDU  
Subject: Internet/News access in Dallas area  
To: info-hams@ucsd.edu

Can someone supply me any details on "News access" in Dallas, Fort Worth area.

Presume there must be some Internet connection.

Actual location is Bedford Tx., and posting is for WA5DAU.

--

73, Tom

=====  
Tom Wagner, Audio Visual Technician. Malaspina College Nanaimo British Columbia  
(604) 753-3245, Local 2226 Fax (604) 755-8742 Callsign VE7GDA

I do not recycle..... I keep everything! (All standard disclaimers apply)  
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Date: 7 Mar 93 14:33:50 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Looking for JVFAX-5.0 Users  
To: info-hams@ucsd.edu

I would like to hear from anyone using the JVFAX program to copy the WX-SATS. I am specifically interested in what type of interface you are using and would like to obtain a schematic of the AM to FM converter needed. ( I would like to stay with the comparator type circuit mentioned in the docs) I would also like info on defining some of the other fax modes that do not come predefined.

Ron - KA5LUG

RON@NSULA.EDU

-----  
Date: Sun, 7 Mar 1993 23:53:29 GMT  
From: swrinde!ringer!lonestar.utsa.edu!dlaro@network.UCSD.EDU  
Subject: Periphex SUCKS!  
To: info-hams@ucsd.edu

Unhappy customer writes:

>> Just got off the phone with Periphex, and boy, am I pissed! Here's  
>> the fiasco: My BP-84S suffers a minor deceleration trauma from about  
>> a six-inch drop. Predictably, the battery rail breaks (gotta love  
>> those Icom battery rails for the 24AT). So I called Periphex, thinking  
>> maybe they'd help, and they tell me it'll cost \$29 EVEN THOUGH THE  
>> BATTERY IS STILL UNDER WARRANTY!

I'm at a loss to understand why you're unhappy with Periphex. I just bought two batteries and a replacement pack and all worked well. If I happened to drop one and break it, though, I would never imagine that they would replace it.

Have you ever driven a new car very "lightly" into a post or obstruction in a parking attempt and found a large pile of grey plastic on the ground? I just did. \$75 for the new imitation "chrome" trim, and I considered myself lucky. (expected about \$300) But I would never, in my wildest dream, expect GM to fix it for free. Yes, it was only two months old and "still under warranty" but you really need to read those warranties sometime. They only cover a few things that are specifically "their" fault. Almost never cover things that are "my fault."

Good luck finding a better source with a better warranty.

-----  
Date: Fri, 05 Mar 93 14:25:47 GMT  
From: ftpbox!mcdchg!laidbak!tellab5!balr!ttd.teradyne.com!news@uunet.uu.net  
Subject: Periphex SUCKS!  
To: info-hams@ucsd.edu

In article <93062.154545UD173191@NDSUVM1.BITNET>, UD173191@NDSUVM1.BITNET (Greg Moore) writes:

> Just got off the phone with Periphex, and boy, am I pissed! Here's  
> the fiasco: My BP-84S suffers a minor deceleration trauma from about  
> a six-inch drop. Predictably, the battery rail breaks (gotta love  
> those Icom battery rails for the 24AT). So I called Periphex, thinking  
> maybe they'd help, and they tell me it'll cost \$29 EVEN THOUGH THE  
> BATTERY IS STILL UNDER WARRANTY! They basically said "Icom's design  
> flaw; your problem." The thing that particularly irritates me is that  
> they never mention this anywhere.  
>  
> Is there anything I can do, short of forking over \$29 to get this thing  
> fixed?  
>

Grow up. YOU broke it. YOU dropped your radio. How you can possibly think that the manufacturer should take responsibility for YOUR fumble fingeriness is beyond me. Warranty has absolutely nothing to do with it. The product was obviously NOT defective...YOU BROKE IT.

Geeesh - these kids.

> Greg Moore N00DQ Tech+  
> President, Sioux Amateur Radio Club  
> University of North Dakota

-----  
Date: Mon, 8 Mar 1993 02:57:55 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!caen!umeecs!jaguar!  
mech3975@network.UCSD.EDU  
Subject: Periphex SUCKS!  
To: info-hams@ucsd.edu

UD173191@NDSUVM1.BITNET (Greg Moore) writes:

: Just got off the phone with Periphex, and boy, am I pissed! Here's  
: the fiasco: My BP-84S suffers a minor deceleration trauma from about  
: a six-inch drop. Predictably, the battery rail breaks (gotta love  
: those Icom battery rails for the 24AT). So I called Periphex, thinking

A good friend of mine, has an Icom W2A, which suffers from the same lame rails. All but one of the batteries he owns have a broken rail on them... (3 or 4 batteries) The way he fixes them, is he has a large supply of dead motorola batteries at his workplace, and he does a major hack job, and ends up with a chunk of the motorola pack's case, in place of the Icom rail... he clues it together with some special plastic cement he has... Seems to work pretty good... not the best looking, but quite functional.

My Yaesu FT470 survived a 4 ft drop onto concrete, with just a tiny scratch on the bottom corner of the battery, where it hit... (no, it wasn't intentional.)

mech3975@nova.gmi.edu

-----  
Date: Fri, 5 Mar 1993 18:51:35 GMT  
From: pipex!sunic!psinnntp!psinnntp!gdstech!gdstech!bat@uunet.uu.net  
Subject: QSL HELP PLEASE  
To: info-hams@ucsd.edu

V31RL goes to NG7A. (Most V31 calls are visitors)

--  
\*-----\*  
\* Pat Masterson D12-25 | KE2LJ@KC2FD \*  
\* Grumman Data Systems | 516-346-6316. \*  
\* Bethpage, NY 11746 | bat@gdstech.grumman.com \*

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Date: 7 Mar 93 23:01:38 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: RACES Bulletin #264  
To: info-hams@ucsd.edu

BID: \$RACESBUL.264

TO: ALL EMERGENCY MANAGEMENT AGENCIES/OFFICES VIA THE ARS  
INFO: ALL RACES OPERATORS IN CA (ALLCA: OFFICIAL)  
ALL AMATEURS U.S. (@ USA: INFORMATION)  
FROM: AUXILIARY RADIO SERVICE  
CA STATE OFFICE OF EMERGENCY SERVICES (W6HIR @ WA6NWE.CA)  
2800 Meadowview Rd., Sacramento, CA 95832 (916)262-1603  
Landline BBS (FIDO) open to all: (916) 262-1657  
RACESBUL.264 DATE: March 8, 1993  
SUBJECT: OPS - THE BUDDY SYSTEM  
Try not to dispatch a volunteer into the field by his or

herself. For safety's sake send two people together.

This is a common sense approach for response to both urban and rural incidents. There is strength in numbers. As well as personal safety, health, welfare, and mutual assistance.

A field assignment can often be accomplished by one person, such as delivering something from point A to point B. The task will be easier and safer, however, when two people do it. The Scouting program teaches the buddy system. It's something you should never outgrow, whether or not you were ever a Scout. It is not too dramatic to say that it might mean the difference between life and death. I know that there will many people reading this who can illustrate the wisdom of the buddy system with real life examples.

Do your people a favor --- and their loved ones. Observe the buddy system in all your field operations. Take this from an Eagle Scout who has had more than his share of close calls.

---Stanly E. Harter, Auxiliary Communications Service Coordinator  
kh6gbx@wa6nwe.#nocal.ca.usa.na (916)262-1603

EOF

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RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

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Date: Sun, 7 Mar 93 22:21:53 GMT  
From: mnemosyne.cs.du.edu!nyx!mwgordon@uunet.uu.net  
Subject: Rubber radios? (was Re: Periphex Doesn't Suck)  
To: info-hams@ucsd.edu

In article <11021@news.duke.edu> jbs@ee.egr.duke.edu (Joe B. Simpson) writes:  
>Would there be any good reason not to manufacture an HT covered in, say,  
>1/16" of neoprene or some other rubber-like substance? It just might make  
>it a lot harder to damage internal parts and such when dropped from small  
>heights.

How about a rubber wrap around 'boot', similar to the ones on Fluke (and other) meters?

Again, just an idea.  
Mike Gordon N9LOI mwgordon@nyx.cs.du.edu

-----  
Date: 7 Mar 93 19:19:34 PST  
From: usc!wupost!spool.mu.edu!caen!destroyer!cs.ubc.ca!unixg.ubc.ca!ucla-mic!

MVS.OAC.UCLA.EDU!CSMSCST@network.UCSD.EDU  
Subject: V26AS address  
To: info-hams@ucsd.edu

The QSL route for V26AS is apparently YU1RL. This is the same route as for V27T in last year's tests. I got my QSL for the Feb, 92, V27T operation about 3 weeks ago, so don't hold your breath waiting for V26AS cards...

-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

-----  
Date: Mon, 8 Mar 1993 03:01:33 GMT  
From: usc!howland.reston.ans.net!newsserver.jvnc.net!stevens-tech.edu!  
vaxc.stevens-tech.edu!u95\_dgold@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <PHR.93Mar4125941@napa.telebit.com>, <1n80j7INN7hv@topaz.bds.com>,  
<1n9bbq\$19g@bigboote.WPI.EDU>p  
Subject : Re: Periphex Doesn't Suck

> About all they could have done would have been to anticipate the problem  
> and design a battery pack with rails that could be replaced easily and  
> cheaply by the consumer without having to send the pack back to get the  
> case replaced. Of course, this would drive the cost of the pack up, and it  
> would probably be necessary to increase it's height as well to accomodate  
> the replaceable rails.

>

>

Greg

=====

If some company (preferably ICOM) made a battery with metal rails, wouldn't the problem be solved.

-Dave  
N2MXX

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End of Info-Hams Digest V93 #287  
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